



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

fw

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,231	04/02/2001	Kyoaki Fujikura	010272	6692
38834	7590	06/03/2005	EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP			PARK, CHAN S	
1250 CONNECTICUT AVENUE, NW				
SUITE 700			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20036			2622	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/822,231	FUJIKURA, KIYOAKI
	Examiner CHAN S. PARK	Art Unit 2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 21 January 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-12 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 1/21/05, and has been entered and made of record. Currently, **claims 1-12** are pending.

Response to Arguments

2. Upon review of the references of Saito et al. U.S. Patent No. 6,417,935 (hereinafter Saito) and Nishikawa et al. U.S. Patent No. 5,532,811 (hereinafter Nishikawa), which were cited in the Office Action dated 10/21/04 under 35 U.S.C. 103(a), examiner notes that the references can still be interpreted to apply under 35 U.S.C. 103(a), as currently amended.

Particularly, as amended, **claims 1 and 7** now require sending said printing command and said printing data to said mechanical controller "according to the calculated physical length of said logical-pages and a physical length of one page of said printing medium". Saito discloses a printer apparatus (fig. 6), which is specified by the host to print in logical-page units (col. 8, lines 50-51), and comprises:

a mechanical controller (printer control CCT 619) for receiving a printing command and controlling a printing engine (LBP 615) that prints on a printing medium (col. 10, lines 18-20); and

a printer controller (CPU 601) for receiving a printing instruction from said host (col. 8, lines 50-51) to print in logical-page units and creating printing data (col. 9, lines 21-23 & 27-30);

wherein said printer controller calculates the total length of said logical-pages after creating said printing data, according to the calculated physical length of said logical-pages and a physical length of one page of said printing medium, sends said printing command and said printing data to said mechanical controller (col. 7, lines 36-62; col. 11, line 63 – col. 12, line 3; and fig. 7).

As noted in the previous Office Action, Saito does not disclose expressly that the mechanical controller detects when there is no said printing medium in said printing engine.

Nishikawa, the same field of endeavor of printing the print data from the host, discloses a detector for detecting “no paper” state when a print command is sent (col. 2, lines 42-47 & col. 4 lines 10-16).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the detector of Nishikawa into the printing apparatus of Saito.

The suggestion/motivation for doing so would have been to notify the user whether there is a paper available to print the print job sent by the host.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., “preventing logical-page data from being printed on separate pages when a “paper out” error occur”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The examiner agrees with the applicants, in that the process performed by the current

invention is different than what the combination of Saito and Nishikawa teaches. However, this difference is not apparent in the current claim wording. The examiner simply does not find how said printer controller “prevents” logical-page data from being printed on separate pages when a “paper out” occurs according to the current claim wording. Thus, the combination of Saito and Nishikawa can be interpreted as teaching the claims limitations of the applicants’ invention.

Claim Objections

3. Claim 1 is objected to because of the following informalities:

Line 7, “date” should be -- data --;

Line 9, insert -- total -- between “calculated” and “physical”;

Line 9, insert -- a -- between “and ” and “physical”;

4. Claim 7 is objected to because of the following informalities:

Line 11, insert – the -- between “and” and “physical”;

Line 12, “printing” should be -- print --;

5. Claim 11 is objected to because of the following informalities:

Line 3, “printing” should be -- print --.

Appropriate correction is required.

The following quotations of 37 § CFR 1.75(d)(1) is the basis of objection:

(d)(1) The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See § 1.58(a)).

6. Claim 2 recites the limitation "said physical length" in line 4. There is insufficient antecedent basis for this limitation in the claim. Perhaps, it should be "said physical length of one page of said printing medium".
7. Claim 8 recites the limitation "said physical length" in line 4. There is insufficient antecedent basis for this limitation in the claim. Perhaps, it should be "said physical length of one page of said printing medium".

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 4, 6, 10 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 3 recites the limitation "the logical-page lengths" in line 2. There is insufficient antecedent basis for this limitation in the claim.
9. Claim 4 recites the limitation "the logical-page lengths" in line 3. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 6 recites the limitation "said physical length" in line 2. There is insufficient antecedent basis for this limitation in the claim.

11. With respect to claim 10, arguments analogous to those presented for claim 4, are applicable.

12. With respect to claim 12, arguments analogous to those presented for claim 6, are applicable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. U.S. Patent No. 6,417,935 (hereinafter Saito) in view of Nishikawa et al. U.S. Patent No. 5,532,811 (hereinafter Nishikawa).

13. With respect to claim 1, Saito discloses a printer apparatus (fig. 6), which is specified by the host to print in logical-page units (col. 8, lines 50-51), and comprises:
a mechanical controller (printer control CCT 619) for receiving a printing command and controlling a printing engine (LBP 615) that prints on a printing medium (col. 10, lines 18-20); and

a printer controller (CPU 601) for receiving a printing instruction from said host (col. 8, lines 50-51) to print in logical-page units and creating printing data (col. 9, lines 21-23 & 27-30);

wherein said printer controller calculates the total length of said logical-pages after creating said printing data, according to the calculated physical length of said logical-pages and a physical length of one page of said printing medium, sends said printing command and said printing data to said mechanical controller (col. 7, lines 36-62; col. 11, line 63 – col. 12, line 3; and fig. 7).

Since the print data can be generated and sent from the host computer, the facsimile apparatus of Saito is considered to be a printer having the image processor for creating print data and combining processor for combining logical pages.

Saito, however, does not disclose expressly that the mechanical controller detects when there is no said printing medium in said printing engine.

Nishikawa, the same field of endeavor of printing the print data from the host, discloses a detector for detecting “no paper” state when a print command is sent (col. 4 lines 10-16).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the detector of Nishikawa into the printing apparatus of Saito.

The suggestion/motivation for doing so would have been to notify the user whether there is a paper available to print the print job sent by the host.

Therefore, it would have been obvious to combine Saito with Nishikawa to obtain the invention as specified in claim 1.

14. With respect to claim 2, Saito discloses the printer apparatus wherein, said printer controller creates bitmap data (col. 9, lines 21-23 & 27-30) for each logical page as said printing data according to the printing instruction from said host for printing in logical-page units until the total physical length of plurality of said logical pages reaches said physical length (col. 5, lines 45-50 & col. 7, lines 54-62), and then sends said print command and said bitmap data in logical page units to said mechanical controller in said logical-page units (col. 10, lines 19-24 & fig. 2).

15. With respect to claim 3, Saito discloses the printer apparatus wherein said printer controller receives the logical-page lengths from said host, and calculates the total physical length of said logical-pages (col. 5, lines 45-50 & col. 7, lines 54-62). Since the calculation is performed inside the printer, the printer controller must receive the logical-page lengths for the calculation. Thus, it would have been obvious to one of ordinary skill in the art to get the lengths from the host, which is the replacement of the scanner 613 (col. 8, lines 50-51).

16. With respect to claim 4, Saito discloses the printer apparatus wherein said printer controller calculates the physical length of said total logical pages, according to the logical-page lengths and number of logical pages received from said host (col. 5, lines 45-50 & col. 7, lines 54-62). Since the calculation is performed inside the printer, the printer controller must receive the logical-page lengths for the calculation. Thus, it would have been obvious to one of ordinary skill in the art to get the lengths from the host, which is the replacement of the scanner 613 (col. 8, lines 50-51).

17. With respect to claim 5, Nishikawa discloses the printer apparatus wherein a printing engine comprises an engine for printing on a continuous printing medium, having a set fold length, as said printing medium (abstract & col. 2, lines 26-28).
18. With respect to claim 6, Saito discloses the printer apparatus wherein said printer controller checks said physical length in said logical-page unit (col. 5, line 57 – col. 6, line 4).
19. With respect to claim 7, Saito teaches a print control method for printing in logical-page units according to a command of a host, and comprise the steps of:
 - receiving a printing instruction from said host to print in logical-page units (col. 8, lines 50-51);
 - creating printing data to be printed on a print medium by a print engine according to said printing instruction (col. 9, lines 21-23 & 27-30);
 - calculating the total physical length of said logical-pages (col. 7, lines 55-57);
 - referencing a physical length of one page of said print medium (record sheet length Y);
 - sending a printing command and said printing data to mechanical controller for controlling said print engine according to the calculated physical length of said logical-pages and the physical length of one page of said print medium (col. 7, lines 36-62; col. 11, line 63 – col. 12, line 3; and fig. 7).

Since the print data can be generated and sent from the host computer, the facsimile apparatus of Saito is considered to be a printer having the image processor for creating print data and combining processor for combining logical pages.

Saito, however, does not disclose expressly that the mechanical controller detects when there is no said printing medium in said printing engine.

Nishikawa, the same field of endeavor of printing the print data from the host, discloses a detector for detecting "no paper" state when a print command is sent (col. 4 lines 10-16).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the detector of Nishikawa into the printing apparatus of Saito.

The suggestion/motivation for doing so would have been to notify the user whether there is a paper available to print the print job sent by the host.

Therefore, it would have been obvious to combine Saito with Nishikawa to obtain the invention as specified in claim 7.

20. With respect to claim 8, arguments analogous to those presented for claim 2, are applicable.

21. With respect to claim 9, arguments analogous to those presented for claim 3, are applicable.

22. With respect to claim 10, arguments analogous to those presented for claim 4, are applicable.

23. With respect to claim 11, arguments analogous to those presented for claim 5, are applicable.

24. With respect to claim 12, arguments analogous to those presented for claim 6, are applicable.

Conclusion

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S. PARK whose telephone number is (571) 272-7409. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chan S. Park
Examiner
Art Unit 2622

csp
May 31, 2005



EDWARD COLES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600